

# STANDARD CONSTRUCTION PLANS FOR STATE FOREST CAMPGROUND - VAULT TOILET

MICHIGAN DEPARTMENT OF NATURAL RESOURCES  
FOREST, MINERAL AND FIRE MANAGEMENT



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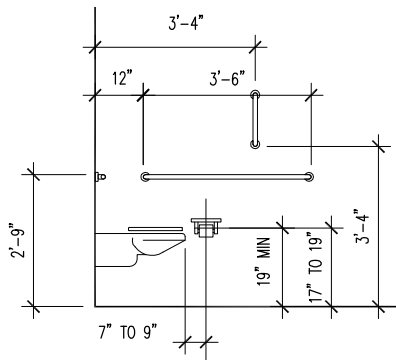
PROJECT NO.	26-3953
INDEX	87540
PCA	84444
DRAWN BY	PS
DESIGNED BY	PS

06/16/10 BIDS & CONSTRUCTION

STANDARD CONSTRUCTION PLANS FOR  
**STATE FOREST CAMPGROUND  
VAULT TOILET**  
STATEWIDE, MICHIGAN



STATE OF MICHIGAN  
DEPARTMENT OF NATURAL RESOURCES  
OFFICE OF LAND AND FACILITIES  
DESIGN & CONSTRUCTION SECTION  
P.O. BOX 30033 LANSING, MI 48909-7933  
517.241.1919 VOICE 517.241.4278 FAX



#### STRUCTURE NOTES:

1. INTERIOR GRAB BARS MUST BE 1-1/2" DIA. BRUSHED OR KNURLED STAINLESS STEEL 42" LONG (#3022) AND 36" LONG (#3021) WITH STAINLESS STEEL FLANGE AS DISTRIBUTED BY ROMTEC INC. OR APPROVED EQUAL.
2. TOILET PAPER DISPENSER (#3004) TO BE LOCKING STAINLESS STEEL, 2-ROLL, THIN BAR WITH RUBBER SLEEVE (#841), 13"x3" LONG, 3/16" THICK, AS DISTRIBUTED BY ROMTEC INC. OR APPROVED EQUAL.
3. HARDWARE ATTACHED TO NON PRESSURE TREATED LUMBER SHALL BE GALVANIZED. ALL HARDWARE THAT MAY BE ATTACHED TO PRESSURE TREATED LUMBER (SILL PLATES) IS TO BE STAINLESS STEEL.

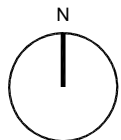
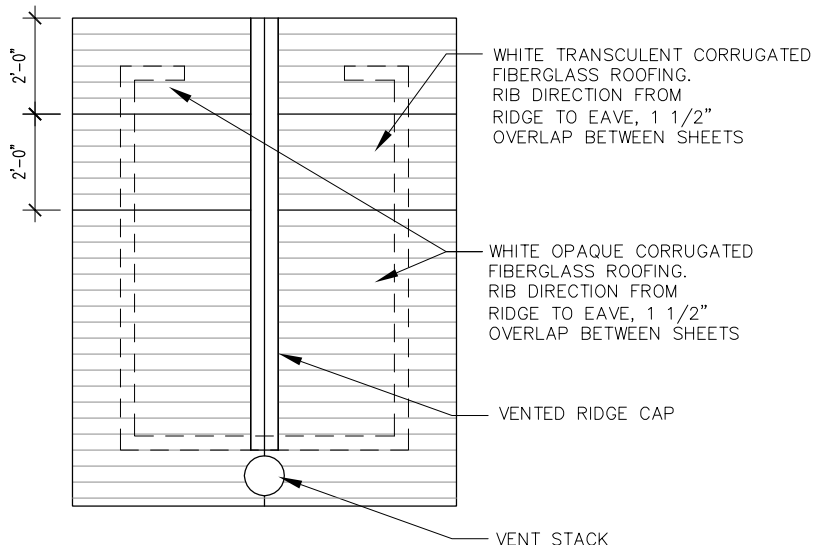
#### HARDWARE SET 1

3 EA. STAINLESS BUTT HINGE LS 4 1/2 X 4 1/2 NRP	32D AMWELD LIBERTY HARDWARE
1 EA. MORTISE LOCK WITH INDICATOR RE 13 S VIN	26D MARSHALL BEST SECURITY
1 EA. COMBINED CORE IC7	26D MARSHALL BEST SECURITY
1 EA. CLOSER LC-4300 ADA (MOUNT ROOM SIDE)	AL AMWELD LIBERTY HARDWARE
1 EA. STOP 1270WV OR 1211 TYPE AS REQUIRE	26D TRIMCO
1 EA. KICKPLATE K0050 10 X 1 1/2 LDW B4E	32D TRIMCO
1 EA. THRESHOLD S205A	AL REESE
1 EA. SWEEP 353A MOUNT PULL SIDE	AL REESE
1 EA. WEATHERSTRIP 854C (HARDWARE COMPATIBLE)	AL REESE

## TYPICAL MOUNTING DIMENSIONS

#### ROOF NOTES:

1. 10" ROOF BOOT WILL BE PLACED AROUND HOLE AREA SPECIFIED FOR THE VENTILATION STACK
2. EAVES ARE TO BE BOXED IN AND VENTED



## ROOF PLAN

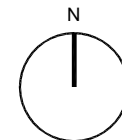
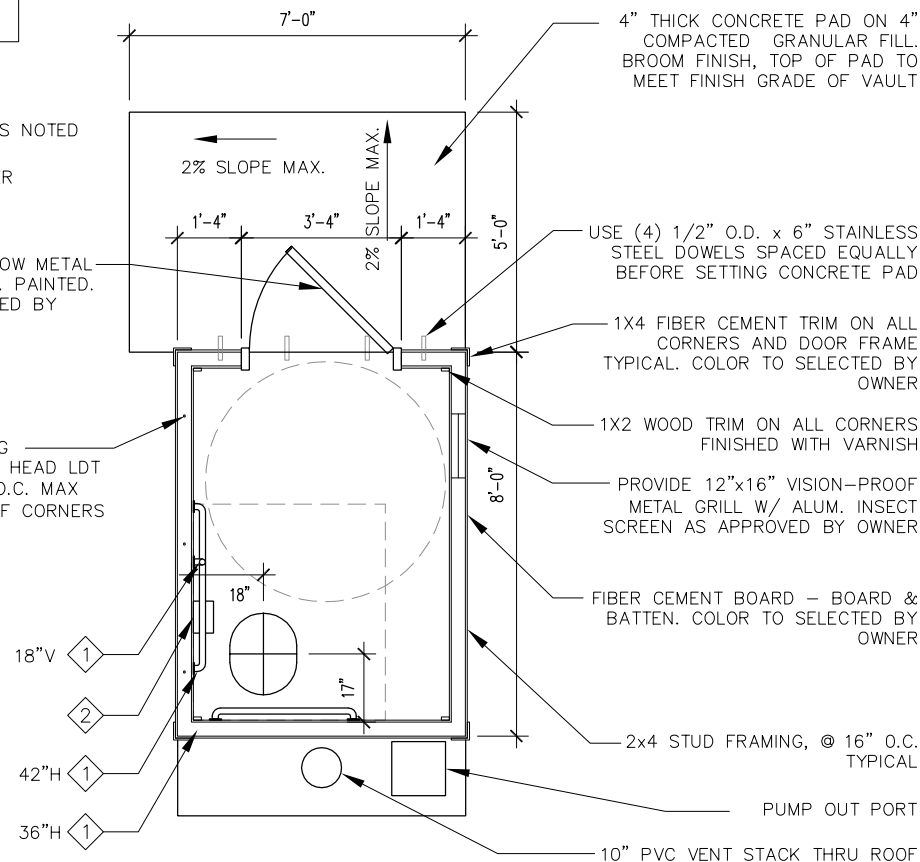
SCALE: 1/4"=1'-0"

#### TOILET ACCESSORIES

- 1 GRAB BAR - SIZE AS NOTED
- 2 TOILET PAPER HOLDER

3'-0"x6'-8" HOLLOW METAL DOOR AND FRAME. PAINTED. COLOR TO SELECTED BY OWNER

1/2" DIA. X 4" LONG GALVANIZED RED HEAD LDT ANCHORS @ 32" O.C. MAX AND WITHIN 12" OF CORNERS



## FLOOR PLAN

SCALE: 1/4"=1'-0"

# A1

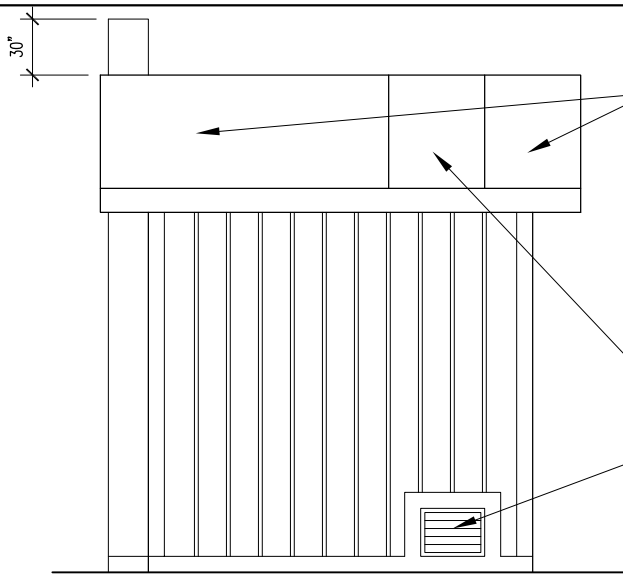
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**EAST ELEVATION**

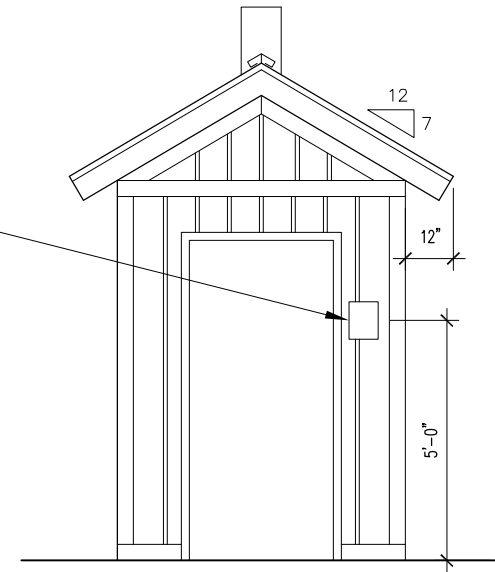
SCALE: 1/4"=1'-0"

WHITE OPAQUE CORRUGATED  
FIBERGLASS ROOFING

RUSTIC TOILET ADA SIGN AND  
MENS/WOMENS OR UNISEX TOILET SIGN  
AVAILABLE FROM: MIDWEST SIGN  
COMPANY WAYLAND, MICHIGAN  
1-800-245-5800

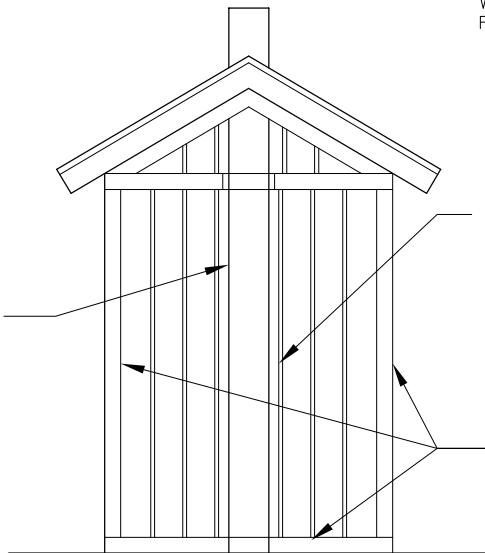
WHITE TRANSLUCENT CORRUGATED  
FIBERGLASS ROOFING

PROVIDE 12"x16" VISION-PROOF METAL  
GRILL W/ ALUM. INSECT SCREEN AS  
APPROVED BY OWNER



**NORTH ELEVATION**

SCALE: 1/4"=1'-0"



**SOUTH ELEVATION**

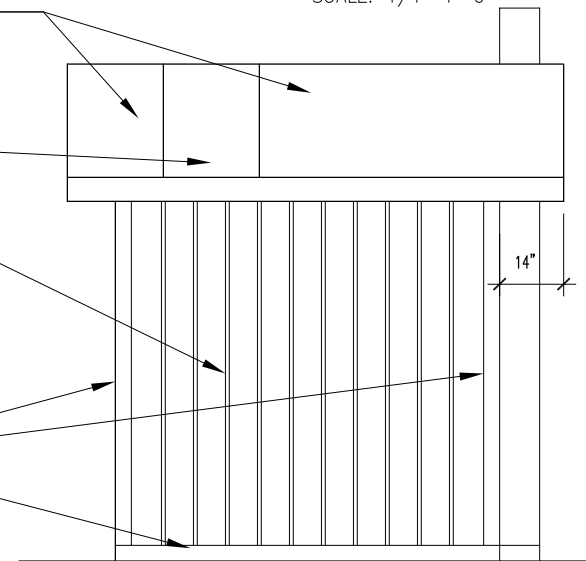
SCALE: 1/4"=1'-0"

WHITE OPAQUE CORRUGATED  
FIBERGLASS ROOFING

WHITE TRANSLUCENT CORRUGATED  
FIBERGLASS ROOFING

FIBER CEMENT BOARD  
BATTEN & BOARD  
COLOR TO SELECTED BY OWNER

1x4 FIBER CEMENT TRIM  
COLOR TO SELECTED BY OWNER



**WEST ELEVATION**

SCALE: 1/4"=1'-0"

**A2**

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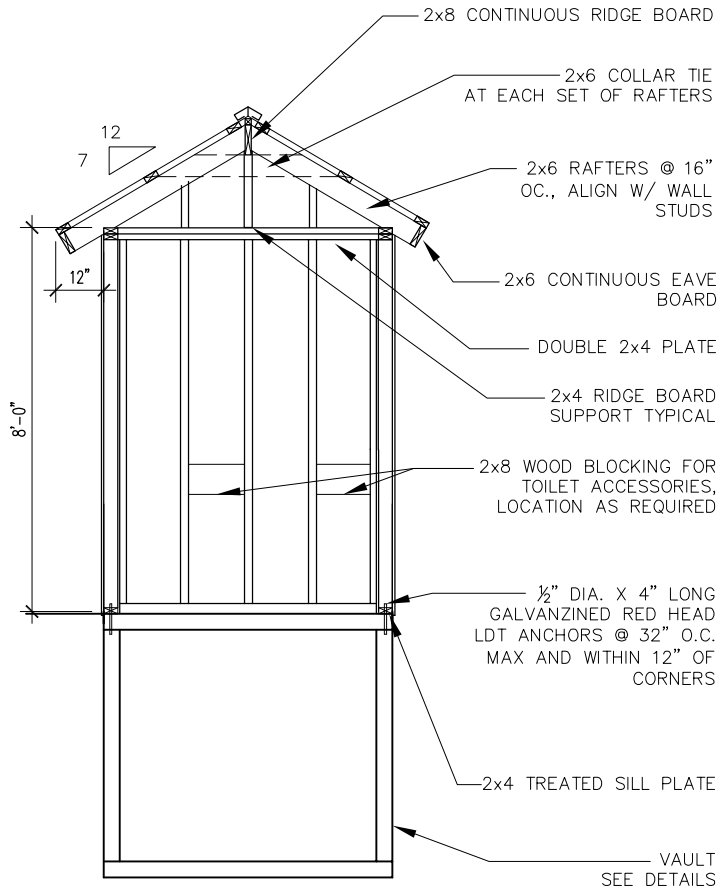
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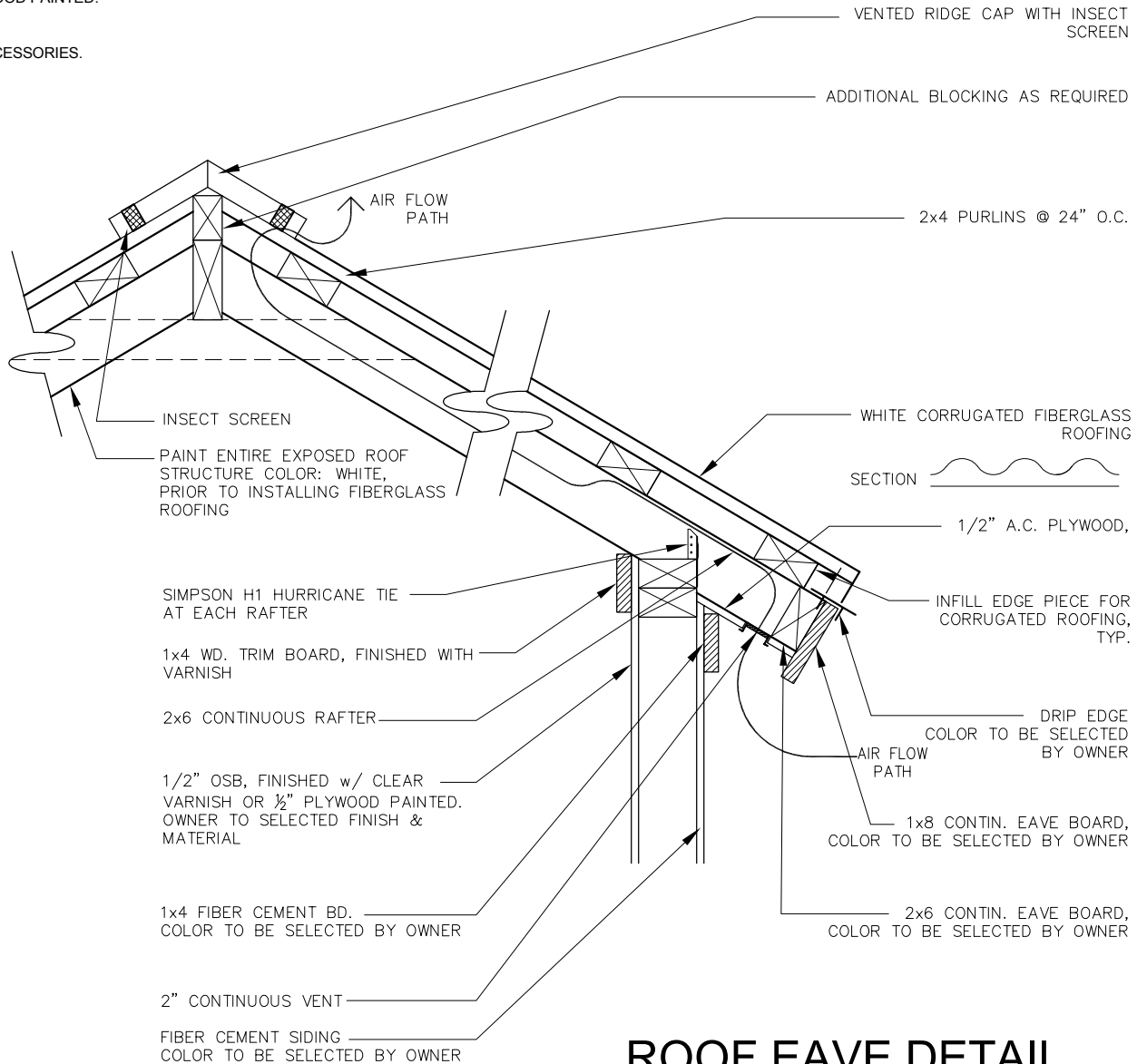
# INTERIOR NOTES:

1. ALL INTERIOR WALLS TO BE A 1/2" OSB, FINISHED w/ CLEAR VARNISH OR 1/2"PLYWOOD PAINTED. OWNER TO SELECTED FINISH & MATERIAL.
2. ADD HORIZONTAL BLOCKING IN BETWEEN STUDS AS NECESSARY FOR TOILET ACCESSORIES.



## SECTION

SCALE: 1/4"=1'-0"



## ROOF EAVE DETAIL

SCALE: 1/2"=1'-0"

A3

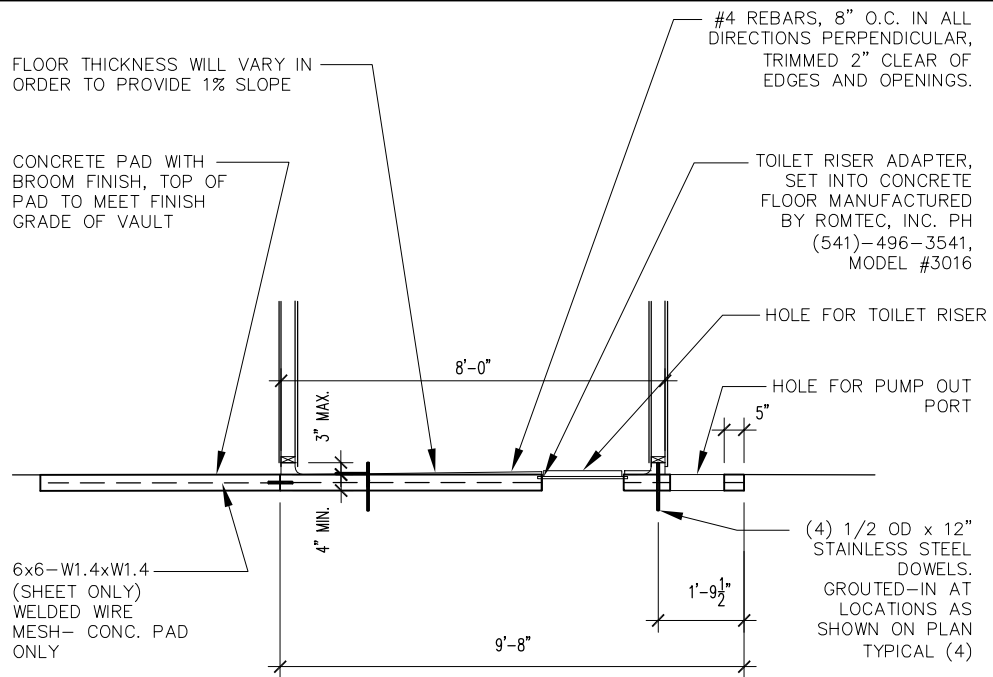
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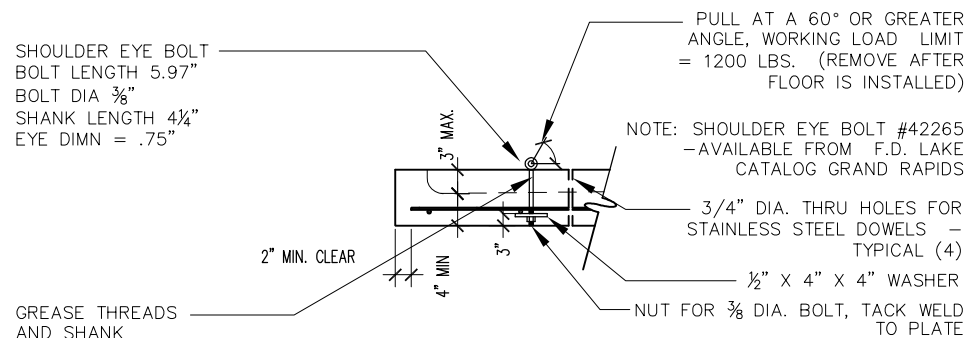


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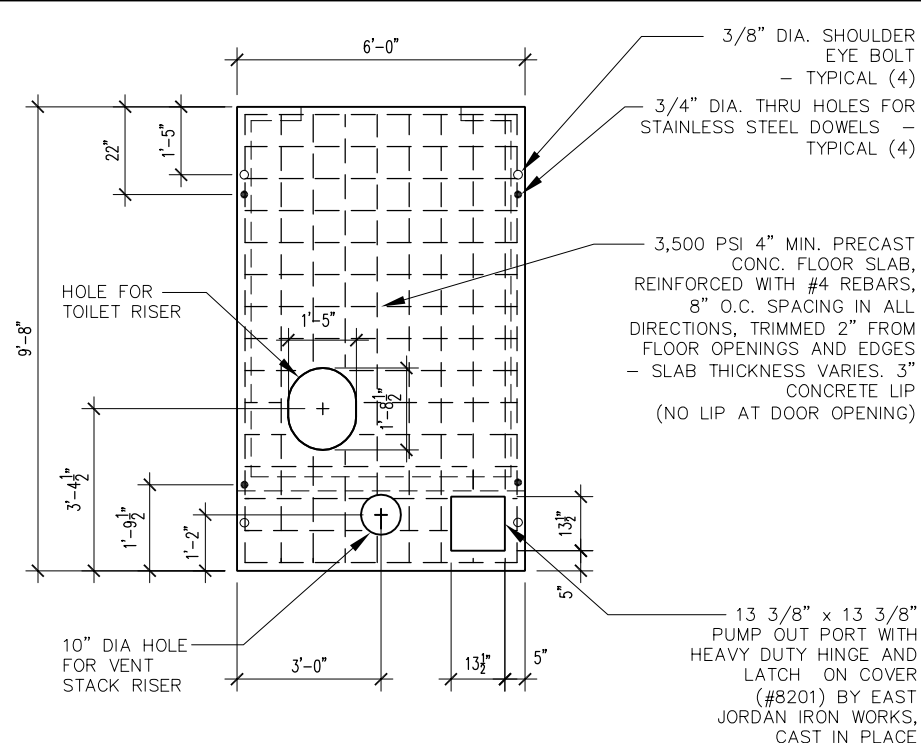
## FLOOR CAP SECTION

SCALE: 1/4"=1'-0"



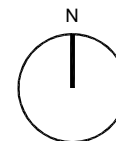
## FLOOR LIFTING/REINFORCEMENT

SCALE: 1/4"=1'-0"



### FLOOR CAP NOTES:

1. PUMP OUT PORT BY EAST JORDAN IRON WORKS
2. TOILET RISER ADAPTER BY ROMTEC AS SHOWN ON FLOOR CAP SECTION
3. SHOP DRAWINGS SHALL BE PROVIDED FOR PUMP-OUT HATCH AND TOILET RISER ADAPTER PRIOR TO START OF MANUFACTURING
4. PROVIDE AND DRILL HOLES FOR (4)
5. 6" AND (4) 12" STAINLESS STEEL DOWELS AS SHOWN FASTENED WITH NON-METALLIC NON-SHRINK EPOXY GROUT EPOXY AS SHOWN. SEALANT FOR CURING CONCRETE FLOOR CAP SHALL BE KURE-N-SEAL LV BY SONNEBORN OR EQUAL.



## FLOOR CAP PLAN

SCALE: 1/4"=1'-0"

A4

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#4 REBARS, 8" O.C. IN ALL DIRECTIONS PERPENDICULAR, TRIMMED 2" CLEAR OF EDGES AND OPENINGS

(4) 1/2" DIA. x 6" LONG STAINLESS STEEL DOWELS

6x6-W1.4xW1.4 (SHEET ONLY) WELDED WIRE MESH (PAD AND VAULT)

1/2" DIA. EXPANSION ANCHORS @ 32" O.C. MAX AND WITHIN 12" OF CORNERS

13 3/8" 13 3/8" PUMP OUT PORT, CAST IN FLOOR CAP

ADHERE CONCRETE FLOOR UNIT TO VAULT UNIT WITH GENERAL PURPOSE BUTYL RESIN SEALANT "CS-101". USE ONLY WHERE PRECAST CONCRETE FLOOR SEATS ON TOILET VAULT.

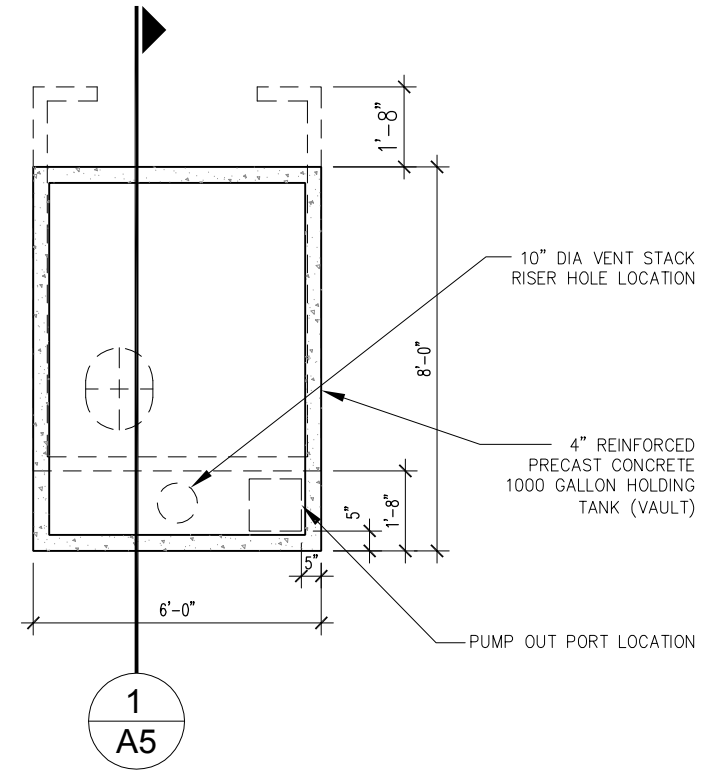
COLD JOINT BETWEEN CONCRETE FOOTING AND VAULT

24"x42" DEEP 3000 PSI FOOTING/WALL, FULL WIDTH OF VAULT

PLACE 12" OF GRANULAR BASE UNDER VAULT AND FOOTING, COMPACTED AT 95%, FOR LEVEL VAULT INSTALLATION AND FOOTING SUPPORT.

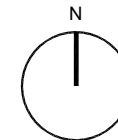
## VAULT SECTION

SCALE: 1/4"=1'-0"



### VAULT NOTES:

1. THE CONTRACTOR SHALL INSTALL MINIMUM 1000 GALLON VAULT (72"x96"x60" DEEP PLAN DIMENSIONS REQUIRED) AS PART OF TOILET BUILDING CONSTRUCTION.
2. SHOP DRAWING SUBMITTALS FOR VAULT TO BE APPROVED BY OWNER PRIOR TO CONSTRUCTION.
3. PROVIDE BUTYL RESIN SEALANT TO COVER 20 SFT - MIN.



## VAULT PLAN

SCALE: 1/4"=1'-0"

**A5**

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